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| **Mahmoud Ali Al-Shugran** | **Contact** |
| **new4.jpg** |
| **Associate professor****Citizenship: Jordanian****Date of birth: 01, Nov. 1966** |
| **Tel. 00962790636493** |
| **m.shquran@jpu.edu.jo** |

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| **Address** |  |
| **Dept. of Computer science\Networking** **Jerash University****Jerash, Jordan****Office: 614 IT Building** |  |

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| **Key Skills** |
| **Proficient or familiar with a vast array of networking subjects, concepts and technologies, including:**

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| 1. **Advanced Computer Networks**
2. **Wireless Networks**
3. **Network Administration**
4. **Network Protocols**
 | 1. **Network Security**
2. **Networks Programming**
3. **Network Forensic Analysis**
4. **Networks Assessment and Auditing**
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| **Education** |
| 1. **2009-2014 Ph.D. College of Arts and Sciences, School of Computing, University Utara Malaysia, Malaysia.**

**Thesis Title: GSAR: Greedy Stand-Alone Position-Based Routing Protocol to Avoid Hole Problem Occurrence in Mobile Ad Hoc Networks.****Area of Specialization: Computer Networks, Mobile Ad Hoc Networks.****Supervisors:*** **Dr. Suhaidi b. Hassan, PhD SMIEEE, Professor, InterNetWorks Research Lab Chairman, School of Computing, University Utara Malaysia, Malaysia**
* **Dr.OsmanGhazali, Deputy Dean/Associate Professor, School of Computing, College of Arts and Sciences, Universiti Utara Malaysia**

1. **2008-2009 M.S. College of Arts and Sciences, School of Computing, University Utara Malaysia, Malaysia.**

**Thesis Title: The Appropriate FEC Parity Amount to Guarantee High Quality for Video Streaming.****Area of Specialization: Computer Networks, Distributed applications, Multimedia applications (Streaming Video).****Supervisor:*** **Dr. Suhaidi b. Hassan, PhD SMIEEE, Professor, InterNetWorks Research Lab Chairman, School of Computing, University Utara Malaysia, Malaysia**
1. **1984-1989 B.Sc. Physics Department, The College of Science, Mu’tah University.**

 **Area of Specialization: Physics** |

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| **Work Experience** |
| **2015-now Jerash University /Jordan** Assistant professor in Computer Science  |

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| **Committee Membership** |
| * Member of InterNetWorks Research Group, College of Arts and Sciences, Universiti Utara Malaysia, Malaysia.
* Member of 3ed International Conference On Network Application, Protocols & Services (NetAPPS 2012).
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| **Research interest**  |
| * Network Performance
* Wireless and Mobile Networks
* Network Quality of Service (QoS)
* Network modelling and Simulation
* Internet of Things
* Internet of Everything
* Cloud computing
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| **Research statement**  |
| Since 2015 I have been an assistant professor in Jerash University Department of Computer Science/Networking. My training is in mobile Ad hoc Networking (MANET) and how to implement it in higher education (Ph.D. in Networking, UUM University, 2014). I designed two main models the first one is dynamic beaconing-update mechanism and the second one is dynamic and reactive reliability estimation with selective metrics mechanism. Both models were integrated to shaped an enhanced version of position-based routing protocol for MANET. **Current and Future work:**Currently, I am working on research that explores the design considerations for developed a new routing protocol for Vehicular Ad-hoc Network (VANET) which would improve routing in both Urban and City environments. In the next three years, I am pursuing to start a project in the internet of things (IoT); I will investigate routing problems related to IoT to improve its performance. |
| **Publications /Conferences**  |
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| Mahmoud Al-Shugran, Osman Ghazali and Suhaidi Hassan," A General Framework for Greedy Routing in Mobile Ad-hoc Networks, " in the Proceeding of International Conference on Advanced Computer Science Applications and Technologies (ACSAT2012), Kuala Lumpur, Malaysia, Indexed by the IEEE Xplore, 26-28 Nov. 2012.Mahmoud Al-Shugran, Osman Ghazali and Suhaidi Hassan, " Performance Comparison of Position-Based Routing Protocol in the Context of Enhancing Greedy Failure," in the Proceeding of International Conference on Advanced Computer Science Applications and Technologies (ACSAT2012), Kuala Lumpur, Malaysia, Indexed by the IEEE Xplore, 26-28 Nov. 2012.M. A. Al-shugran,M. M. A. Shqier and G. M. Jaradat, "Adaptive Dynamic Update for Greedy Routing Protocol Using Fuzzy Logic Controller and Mobility Prediction," 2018 IEEE International Conference on Electro/Information Technology (EIT), Rochester, MI, 2018, pp. 0852- 0857. |

 |
| **Publications /Journals**  |
| Mahmoud Al-shugran, Osman Ghazali, Suhaidi Hassan, KashifNisar, and A. Suki M. Arif "A Qualitative Comparison Evaluation of the Greedy Forwarding Strategies in Mobile Ad Hoc Network," Journal of Network and Computer Applications, vol. 36, issue 2, pp. 887–897, Impact factor 1.467, Publisher Elsevier, Mar. 2013.Mahmoud Al-shugran, Osman Ghazali, Suhaidi Hassan, "Adaptive and Dynamic Beaconing Update Mechanism for Position Based Routing Protocols," the IETE Journal of Research, Article ID: IETEJR\_17\_13, likely issue: Suppl-1:2013 . Impact factor 0.2, Indexed by Scopus, DOAJ, EBSCO , ASAP, and SCOLOAR, 2013.Almomani, Omar, Mahmoud Al-shugran, Jafar A. Alzubi, and Omar A. Alzubi. "Performance evaluation of position-based routing protocols using different mobility models in manet." Performance Evaluation 119, no. 3 2015.Alzubi, Jafar A, Almomani, Omar, Alzubi, Omar A, Al-shugran, Mahmoud" Intelligent and Dynamic Neighbourhood Entry Lifetime for Position-based Routing Protocol Using Fuzzy Logic Controller" International Journal of Computer Science and Information Security, vol. 14 no. 1, pp 1947-5500, LJS Publishing 2016, Almomani, O., Al Balas, F., Alzubi, J. A., Al-shugran, M., &Alzubi, O. A. (2016). Dynamic and Reactive Multi-Objective Routing Decision in Position-based Routing Protocols. International Journal of Computer Science and Network Security (IJCSNS), 16(6), 62.‏Alnabhan, M., Alshuqran, M., Hammad, M., & Al Nawayseh, M. (2017). Performance Evaluation of Unicast Routing Protocols in MANETs–Current State and Future Prospects. International Journal of Interactive Mobile Technologies (iJIM), 11(1), 84-97.‏A Habboush, M AlShugran An Enhanced Queue Management Approach for Greedy Routing in MANETs, Computer and Information Science, 2018.Ghaith M. Jaradat, Anas Al-Badareen, Masri Ayob, Mutasem Al-Smadi, Ibrahim Al-Marashdeh, Mahmoud Ash-Shuqran, Eyas Al-Odat, Hybrid Elitist-Ant System for Nurse-Rostering Problem, Journal of King Saud University - Computer and Information Sciences,Volume 31, Issue 3, 2019, Pages 378-384, ISSN 1319-1578, https://doi.org/10.1016/j.jksuci.2018.02.009.Al Shugran, Mahmoud Ali, Applicability of Overlay Non-Delay Tolerant Position-Based Protocols in Highways and Urban Environments for Vanet (2021). International Journal of Wireless & Mobile Networks (IJWMN) Vol.13, No.2, April 2021, Available at SSRN: https://ssrn.com/abstract=3844320Abu-Alaish, Ahmad; Jaradat, Ghaith; Al-Shugran, Mahmoud; Alodat, Iyas, Automating SWOT Analysis Using Machine Learning Methods. International Journal of Advances in Soft Computing & Its Applications . July 2021, Vol. 13 Issue 2, p139-161. 23p. Available at Al Shugran, Mahmoud Ali, Beacon-Based Non-Delay Tolerant Routing Protocols for VANET: A Systematic Comparison (2021). Modern Applied Science, Vol.15, No.5, August 2021, Available at https://ccsenet.org/journal/index.php/mas/article/view/0/458761. Al Shugran, Mahmoud Ali, Non-Delay Tolerant Non-Overlay Routing Protocols Performance Evaluation for VANET, (2021). Computer and Information Science, Vol.14, No.4, September 2021, Available at https://ccsenet.org/journal/index.php/cis/article/view/0/45910
 |
| **Funding and support** |
| * Research Scholar (Jerash university). 200$. 2107-2018.
* Research Scholar (Jerash university). 280$.2020-2021.
 |
| **Teaching**  |
| **Courses taught:*** Advanced Computer Networks
* Introduction to Data Communications and Networking
* Wireless Networks
* Network Administration
* Network protocols
* Networks Assessment and Auditing
* Networks-Programming
* Network security
* Network and Information security
* Network Forensic Analysis
* Electronic commerce Security
* Project Management Software
* Management Information Systems
* Data retrieval systems
* Human and Computer Interaction
* Introduction to computer and Internet
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| **References**  |
| **The first one** |
| **Name**  | **Dr. Suhaidi b. Hassan (MSc and PH.D. supervisor)** |
| **Position** | Professor PhD SMIEEEInterNetWorks Research Lab Chairman School of Computing College of Arts and Sciences  |
| **Address** | Universiti Utara Malaysia 06010 UUM SintokKedah, Malaysia E-mail : suhaidi@uum.edu.my Telephone: +60 (4) 928 6040 Fax : +60 (4) 928 4753  |
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| **The second one:** |
| **Name** | **Dr.Osman Ghazali (PH.D. supervisor)**  |
| **Position**  | Deputy Dean/Associate Professor School of Computing College of Arts and Sciences  |
| **Address** | Universiti Utara Malaysia 06010 UUM SintokKedah, Malaysia Tel: +6049285052 Fax: +6049285067 HP: +60124422747 Email :osman@uum.edu.my |
| **The third**  |
| **Name**  | Dr. Ahmad Habboush |
| **Position** | professor Dean of the Faculty of Computer Science and ITat Jerash University |
| **Address** | Jreash University, Jerash,Jordan.Mobile:+962777655611Fax:+96226350520P.O.Box 311, 26150Jerashahmad\_ram2001@jpu.edu.joahmad\_ram2001@yahoo.com |

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| **Languages** |
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| **Arabic** (native) | **English** (fluent) |

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| **Faculty Community Service** |
| * Curriculum and Study Plans Committee 2018-2021
* Academic Advising Committee 2018-2021
* Committee to prepare, update, follow-up and implement the college’s strategic plan 2020-2021
* Disciplinary Committee 2020-2021
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